

### CLAIMS

#### What is claimed is:

- 5 1. A method for treating, preventing, or reducing reperfusion injury or post-pump syndrome by administering an inhibitor of vascular endothelial growth factor-mediated vascular permeability.
2. The method of claim 1, wherein the inhibitor comprises an inhibitor of a Src  
10 family kinase.
3. The method of claim 1, wherein the inhibitor comprises a pyrazolopyrimidin.
4. The method of claim 1, wherein the inhibitor comprises PP1 or PP2.
- 15 5. The method of claim 1, wherein the inhibitor has the chemical formula  $C_{16}H_{19}N_5$ .
6. The method of claim 1, wherein the inhibitor comprises a quinolinecarbonitrile.
- 20 7. The method of claim 1, wherein the inhibitor comprises a 3-quinolinecarbonitrile.
8. The method of claim 1, wherein the inhibitor comprises a 4-anilino-3-quinolinecarbonitrile.
- 25 9. The method of claim 1, wherein the inhibitor comprises SKI-606.
10. The method of claim 2, wherein the Src family kinase comprises Src, Fyn, Yes, Lyn, Lck, or Hck.
- 30 11. The method of claim 2, wherein the Src family kinase comprises Src.
12. The method of claim 1, wherein the inhibitor is administered intravenously.

13. The method of claim 1, wherein the inhibitor is administered by intraperitoneal injection.
- 5 14. The method of claim 1, wherein the inhibitor is administered using an intracoronary method.
15. The method of claim 1, wherein the inhibitor is administered percutaneously.
- 10 16. The method of claim 1, wherein the reperfusion injury is the result of myocardial infarction.
17. The method of claim 1, wherein the reperfusion injury is the result of angina.
- 15 18. The method of claim 1, wherein the reperfusion injury or post-pump syndrome is the result of a coronary revascularization procedure.
19. The method of claim 18, wherein the coronary revascularization procedure comprises a percutaneous coronary revascularization procedure.
- 20 20. The method of claim 19, wherein the percutaneous coronary revascularization procedure comprises angioplasty, stent placement, or atherectomy.
21. The method of claim 18, wherein the coronary revascularization procedure
- 25 comprises angioplasty, comprising an angioplasty balloon, wherein the balloon comprises a coating comprising an inhibitor of vascular endothelial growth factor-mediated vascular permeability.
22. The method of claim 21, wherein the inhibitor comprises an inhibitor of a Src
- 30 family kinase.

23. The method of claim 18, wherein the coronary revascularization procedure comprises angioplasty, comprising an angioplasty balloon, wherein the angioplasty balloon is capable of eluting an inhibitor of vascular endothelial growth factor-mediated  
5 vascular permeability.
24. The method of claim 23, wherein the inhibitor comprises an inhibitor of a Src family kinase.
- 10 25. The method of claim 18, wherein the coronary revascularization procedure comprises stent placement, wherein the stent comprises a coating comprising an inhibitor of vascular endothelial growth factor-mediated vascular permeability.
26. The method of claim 25, wherein the inhibitor comprises an inhibitor of a Src  
15 family kinase.
27. The method of claim 18, wherein the coronary revascularization procedure comprises stent placement, wherein the stent is capable of eluting an inhibitor of vascular endothelial growth factor-mediated vascular permeability.  
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28. The method of claim 27, wherein the inhibitor comprises an inhibitor of a Src family kinase.
29. The method of claim 18, wherein the coronary revascularization procedure  
25 comprises a surgical coronary revascularization procedure.
30. The method of claim 29, wherein the surgical coronary revascularization procedure comprises bypass surgery.
- 30 31. The method of claim 1, wherein the reperfusion injury is the result of stroke or a treatment for stroke.

32. The method of claim 1, wherein the reperfusion injury is the result of compartment syndrome or a treatment for compartment syndrome.

5 33. A method for treating, preventing, or reducing reperfusion injury following ischemia, wherein the ischemia is caused by blockage or leakage of a blood vessel, by administering an inhibitor of vascular endothelial growth factor-mediated vascular permeability, wherein

- 10       a. the inhibitor comprises an inhibitor of a Src family kinase; and  
      b. the ischemia is the result of:  
          i. myocardial infarction;  
          ii. stroke;  
          iii. compartment syndrome;  
          iv. post-pump syndrome; or  
          v. angina.

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34. The method of claim 33, wherein the Src family kinase comprises Src, Fyn, Yes, Lyn, Lck, or Hck.

20 35. The method of claim 33, wherein the inhibitor comprises a pyrazolopyrimidin or a 3-quinolinecarbonitrile.

36. The method of claim 33, wherein the inhibitor comprises PP1, PP2, or SK1-606.

25 37. The method of claim 33, wherein the inhibitor is administered by intravenous, by intraperitoneal injection, by direct injection into an artery, by infusion, by an intracoronary method, or by percutaneous administration.

30 38. A method for treating, preventing, or reducing injury following bypass surgery by administering an inhibitor of vascular endothelial growth factor-mediated vascular permeability, wherein the inhibitor comprises an inhibitor of a Src family kinase.

39. The method of claim 38, wherein the inhibitor is administered as part of the cardioplegia solution.

40. A method for treating, preventing, or reducing reperfusion injury following  
5 compartment syndrome by administering an inhibitor of vascular endothelial growth  
factor-mediated vascular permeability, wherein the inhibitor comprises an inhibitor of a  
Src family kinase.

41. The method of claim 40, wherein the inhibitor is administered by infusion into a  
10 local artery during a surgical procedure for the treatment or relief of the compartment  
syndrome.

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